

A BIBLIOGRAPHY OF THERMOPHYSICAL PROPERTIES FOR FLUORINE FROM 0° TO 300°K

L. A. Hall and R. D. McCarty

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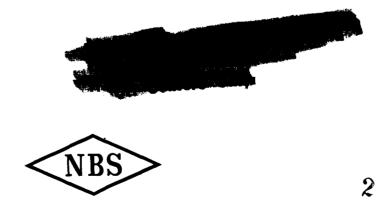
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bу

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A BIBLIOGRAPHY OF THERMOPHYSICAL PROPERTIES FOR FLUORINE FROM O° TO 300°K

by L. A. Hall and R. D. McCarty

Abstract

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This bibliography of thermophysical properties for fluorine from 0° to 300°K presents 51 citations which include author, title, reference, properties studied, temperature and pressure ranges, state of substance, type of data presented (i.e., whether the data are derived from experimental measurements, theoretical considerations or as a compilation from other sources), the form and amount of data. An index according to property, sub-indexed for state of substance, is included.

1. Introduction

This bibliography of the thermophysical properties of fluorine from 0° to 300°K is a result of a thorough search of the world's scientific literature. The initial search of indices of abstracting journals and other publications led to the procurement of pertinent articles and the ultimate search of their bibliographies and references for other pertinent material. We have listed references for company reports as well as references for articles published in journals.

2. Abstracting Journals and Bibliographies Searched

The initial search for references of articles containing information for fluorine at low temperatures included a review of the following:

- 1. Subject Index to Unclassified ASTIA Documents, Vol. 3, Numbers AD 1 to AD 75 000,
- 2. Technical Abstract Bulletin Cumulative Index, Annual Index, 1960,
- 3. List of Publications Issued by the Bureau of Mines from July 1, 1910 to January 1, 1960,
- 4. Chemical Abstracts, Vol. 24 to 55, 1930 to 1962,
- 5. Thermophysical Properties Research Center Retrieval Guide, Y.S. Touloukian, McGraw-Hill Book Company, Inc., New York (1960),
- 6. Cryogenic Data Center Storage and Retrieval System Search, R.G. Smith, National Bureau of Standards, Boulder, Colorado (1962),
- 7. Bibliographies and references cited in each document listed in this bibliography.

3. Format for Listing Citation and Document Contents

The citations have been arranged alphabetically by first author and numbered. Only information from the article which concerns thermophysical properties of fluorine is noted. The information given in each citation includes:

- 1. Author(s),
- 2. Title (original language) and translated title, if original is in a language other than English,
- 3. Reference (If the same article is published in more than one place, both references are cited.),
- 4. Chemical Abstract number or ASTIA number, when they are known,
- 5. Properties studied for fluorine, state of substance, temperature and pressure ranges when appropriate,
- 6. Substances, other than fluorine, which are discussed in the article (Where no fluids are listed, the contents of the document are restricted to properties of fluorine only.),
- 7. Designation as to primary intent of article,
 - a. experimental,
 - b. theoretical,
 - c. compilation*
 - d. reference book #

(For typical examples of the four types of articles, turn to bibliography numbers 6, 8, 19, and 46.)

- 8. Form in which data is reported,
 - a. tabular tables (number of values),
 - b. graphical,
 - c. equations,
- 9. Apparatus, if described or illustrated,
- 10. Original language, if other than English.

The bibliography is cross-indexed according to property with subindexes for the state of the substance, i.e., solid, liquid, or vapor.

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^{*} In compilations, the bibliography number of the original article from which the data was obtained is listed.

[‡] The amount of data in reference books is not given.

4. Index of Properties

- 1. Density (specific gravity)
- 2. Vapor Pressure
- 3. Heat Capacity (specific heat)
- 4. Enthalpy, Entropy, Gibbs Function
- 5. Viscosity
- 6. Surface Tension
- 7. Thermal Conductivity
- 8. Diffusion Coefficients
- 9. Equation of State, Virial Coefficients
- 10. Dielectric Constants
- 11. Index of Refraction
- 12. Triple Point
- 13. Boiling Point (normal)
- 14. Melting Point (normal)
- 15. Critical Point
- 16. Phase Transition Heats, Latent Heats

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14. Melting Point (normal)

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15. Critical Point

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16. Phase Transition Heats, Latent Heats

1, 2, 3, 5, 6, 7, 17, 19, 20, 23, 27, 29, 32, 39, 41, 43, 46

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FLUORINE, ARGON, AIR, NITROGEN, OXYGEN AND 6 OTHER GASES
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